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ABSTRACT

The state of Rhode Island has recently embarked in a new state accountability system for public elementary and secondary education. An overview of the system is provided, coupled with an understanding of accountability systems as technologies of social control. The ramifications of such technologies are discussed along with the costs, benefits, uncertainties, and necessary tensions associated with such systems. The best accountability systems are those that exhibit reflective response to changing contexts and information associated with educational reform. The hardest part is to maintain an appropriate level of tension between state control and direction, and local autonomy and ownership. Rhode Island is attempting to realize this goal. (Contains 38 references.) (SLD)

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A State Accountability System as a Technology of Social Control: The Case of RI

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Abstract

The state of Rhode Island, USA has recently embarked on a new state accountability system for public elementary and secondary education. An overview of the system is provided coupled with an understanding of accountability systems as technologies of social control. The ramifications of such technologies are discussed along with the costs, benefits, uncertainties, and necessary tensions associated with such systems.

An Introduction to Rhode Island

The State of Rhode Island and Providence Plantations, as it is officially titled, is the smallest state in geographic size in the United States of America, yet is the second most densely populated state. Rhode Island is one of only two states with no county government. It is divided into 39 municipalities, each having its own form of local government (although they are more alike than dissimilar). The Rhode Island legislature, called the General Assembly, is bicameral, with a Senate and a House of Representatives whose members are currently apportioned on the basis of population but soon to be reduced in number as part of more effective government. Election to both houses is for a term of two years. The Governor, Lt. Governor, Secretary of State, Attorney General, and General Treasurer are elected to four-year terms.

Service producing industries are Rhode Island's chief source of income and employ the greatest number of people. Jewelry manufacturing is the single largest industry in the state, making Rhode Island the "Jewelry Capital of the World." Other important sources of income are: Agriculture (dairy and poultry products); Fisheries (especially shellfish); and wholesale and retail trade. Providence, the capital city, is a major wholesale distribution center for New England; its port handles much of the oil shipped throughout the region. Tourism is also one of Rhode Island's largest industries, generating over $1.5 billion dollars in annual revenues.

Public education for students in elementary and secondary schools is the responsibility of the state by constitution. The state historically has ceded responsibility for education to local school districts, although in recent years there has been more a state role. Curriculum, graduation requirements, financing, performance evaluation, and most other duties and responsibilities associated with public education fall under the responsibility of the school committees of local districts and the superintendents whom they appoint. Rhode Island is thus termed, a "local control" state when it comes to

matters of educational policy and practice. "General oversight" of public education, however, rests with the state Board of Regents for Elementary and Secondary Education and their appointed Commissioner. The Board of Regents consists of eleven members as follows: Eight public members appointed by the Governor, the Chairman of the Board of Governors for Higher Education, the Chairman of the Senate Finance Committee or his/her designee, and the chairman of the House Finance Committee or his/her designee. The Commissioner serves at the pleasure of the Regents under a multi-year contract with annual performance evaluation.

The 1990's

The current Commissioner of Education, Peter McWalters, came to Rhode Island in 1992 from the Superintendency of Rochester Public Schools, a medium size city in the state of New York. At that time, the Department of Elementary and Secondary Education advocated for state aid, certified teachers and administrators, provided limited technical assistance in targeted areas, and operated principally in a monitoring mode. Compliance with a Basic Education Plan (1989) for Rhode Island schools and districts focused principally on input measures to both derive and determine quality. The state published an annual set of district and school profiles focusing on demographics, financing, and the results of achievement tests the state administered statewide to all eligible students in three separate grades. Poor performance on state tests resulted in no direct actions by the state. The profiles received limited use by people directly vested in schooling and little use by legislators, local government officials (including school committees), and the general public.

The history of education policy in Rhode Island, until recently, was succinctly summarized in Education Week's 1997 Quality Counts report, "Strong Headwinds," as a wealth of ideas that had little effect on student performance. There was no shortage of energy and ideas within the state, but there was a lack of common agreement on appropriately challenging goals for students, how progress toward those goals should be assessed, and who should be held accountable for their realization in a highly decentralized system. Consequently, student achievement improved only modestly, if at all, for a decade.

Governor Lincoln Almond and the Board of Regents put forth a coherent plan for educational reform in the form of the Comprehensive Education Strategy (CES) in 1996. The CES, developed by the Rhode Island Goals 2000 Panel of some fifty participants, established a clear agenda of high content standards for students, meaningful assessments and accountability for school improvement. The CES is comprised of six broad categories of activity subsumed under two main goals: improving teaching and learning and creating responsive and supportive systems. The principal focus of these activities are to help all Rhode Island's children achieve high standards that the Regents have formally adopted and to close gaps in achievement among different groups of students.

Rhode Island's Comprehensive Education Strategy

IMPROVING TEACHING AND LEARNING	CREATING RESPONSIVE AND SUPPORTIVE SYSTEMS
High Standards	Opportunities for All to Achieve High Standards
Accountability and Assessment	Community and Family Involvement
Accountability and School Improvement	Broad Public and Political Support

In June 1997, Rhode Island's General Assembly elevated many of the principles enunciated within the CES to the status of state law with the passage of Article 31, a budget article that the legislature chose to broaden significantly beyond attention solely to financial matters.

Article 31

The "Rhode Island Student Investment Initiative," (Title 16, Chapter 7.1) the official title for legislation introduced and still known colloquially as "Article 31," consists of a series of program, accountability, and funding provisions which strengthened the power of the state in the affairs of local school districts – in essence taking back some of the responsibility the state had earlier in its history ceded to local districts. The act itself declared, "The intent of this legislation is to enact a comprehensive state education aid funding program that addresses four fundamental principles:

(1) Closing the inequitable resource gaps among school districts and schools;
(2) Closing inequitable gaps in performance and achievement among different groups of students, especially those correlated with poverty, gender, and language background;
(3) Targeting investments to improve student and school performance;
(4) And establishing a predictable method of distributing state education aid in a manner that addresses the over-reliance on the property tax to finance education."

The Act was further designed to "accelerate the implementation of the State Comprehensive Education Strategy," and underscored that "Improved student and school performance is the key measure of the success of Rhode Island's schools." Its provisions include:

(1) adoption of statewide standards of performance by the Board of Regents in writing and mathematics with district accountability for results
(2) accountability for district and school expenditures
(3) annual report by the Commissioner of Education to the General Assembly on the condition of education in the state
(4) state support and intervention for failing schools

(5) equity funds provided to urban districts whose tax base is insufficient to adequately fund core instruction activities
(6) targeted funding for students needing additional educational services to meet the state's performance standards
(7) funding to support the needs of students whose native language is not English
(8) funding targeted to professional development activities for teachers
(9) investment in early childhood education
(10) investment in educational technology
(11) state leadership in conducting annual assessments of student performance
(12) targeted school aid limited to selected areas with a 5% required set-aside for state "intervention remedies"
(13) funds for urban after-school programs

Increasingly in Rhode Island, policymakers have realized the necessity of addressing children's readiness to learn. Too many of RI's children come to school inadequately nourished, lacking fundamental social skills, and exhibiting other symptoms of inadequate response to their needs. Failure to deal consistently and effectively with these issues renders any attempt to raise academic standards and achievement moot.

Coordinating Responsibility for Children among State Agencies

As part of a movement to better coordinate government services to needy families and their children, the Rhode Island General Assembly passed a law in 1991 creating a "Children's Cabinet." The Cabinet is comprised of the Directors of the state departments of Administration and its Office of Library and Information Services; Children, Youth, and Families; Health; Human Services; Labor and Training; and Mental Health, Retardation and Hospitals. The Commissioners of Elementary and Secondary Education and of Higher Education, and the Governor's Policy Director join them.

In the early 1990's, the Children's Cabinet focused on children's health issues and the formation of a flexible, responsive network that could deliver high quality services to the state's children – a daunting task in its own right. Out of this initial effort grew, among other initiatives, the nationally recognized RIte Care, a Medicaid managed care program which provides health insurance for children whose families' incomes are up to 250% of poverty (or 2.5 times that of families who are "officially" in poverty). This program includes children above the poverty line because the "working poor," those with low-wage jobs, are the most likely to be uninsured. (In America there is no national health insurance.) RIte Care has already made a marked improvement in the health of Rhode Island's children.

A second major initiative in the early 1990's was the formation of Child Opportunity Zones (COZ's) which brought social services directly into the school building in an integrated manner so that the needs of whole families were being addressed with the school as the locus. Virtually all of the urban core areas of Rhode Island and an increasing number of suburban communities with pockets of poverty are now part of the COZ initiative.

The Cabinet in 1994 reshaped their goals to recognize schools as the primary interface between children and state agencies and the principal site where maximum positive impact on children could be attained. Their new guiding goals were:

- ✓ All children enter school ready to learn;
- ✓ All youth leave school ready to lead productive lives; and
- ✓ All children and youth are safe in their homes, neighborhoods, and schools.

Since that time the Children's Cabinet has continued to develop its work with more collaboration around improving educational performance. Their conclusions about reducing juvenile delinquency, for example, focus on school success as the most effective prevention against anti-social behaviors.

Cabinet outcomes have also guided related initiatives such as: Healthy Schools! Healthy Kids!, and the Rhode Island Keys to Quality Accreditation Project. Healthy Schools! Healthy Kids! is a statewide plan for comprehensive school health programs developed by the School Health Advisory Council, RI Department of Education, and the RI Department of Health, under funding provided by the U.S. Centers for Disease Control.

The Keys to Quality Project is a collaborative effort of the RI Department of Education and the RI Child Care Training System at Children's Friend and Service. The project seeks to improve early childhood education of children with and without disabilities by assisting school districts and early childhood programs pursuing accreditation by the National Association for the Education of Young Children.

Increased State Accountability in Rhode Island

Rhode Island has established public policy agreements in laws that are targeted toward creating a very different Rhode Island from the one that presently exists. Although overly simplistic, the vision can be summarized in the following table:

FROM	TO
36 school systems working in locally determined ways toward locally determined and quite different goals for students, with the state serving a modest and largely regulatory role.	36 systems working in locally appropriate ways to ensure that all students meet common, clear, and high standards, supported in their efforts by a state that provides information, support, and when necessary, push.
A state in which students' academic performance and consequent life opportunities tend to be defined by the income level of their parents and surrounding community	A Rhode Island in which all students have an equal chance at high academic performance and the opportunities that follow, no matter the community in which they live.
A workforce prepared for the skills-based economy of the past that cannot attract or hold the industry our state needs for sustained economic growth.	A workforce prepared the skills, knowledge and idea-based economy of the future that will attract the economic development our state needs.
A culture of blame in which we point fingers at others when students do not perform successfully.	A culture of responsibility in which each of us steps in wherever necessary to ensure student success.

The emerging consensus about what is desired on the part of schools and school districts in Rhode Island is notable. The appropriate mechanisms by which to achieve the desired results and the means to determine their effectiveness in contributing to positive change are, of course, more elusive. The difficulties of large-scale, structural reform in the "education industry" within the sociopolitical context in which it is embedded are enormous. A useful frame for considering these difficulties and their possible resolutions is to think of accountability systems as technologies of social control. It is to this concept and the implications that flow from it that we now turn.

Technology Defined and its Applicability to Accountability Systems

We live in a pervasively technological world. Technologies of all types are part of the fabric of everyday life. They extend human capabilities, aid in the prevention of disease, facilitate human interaction, structure commerce, and provide endless hours of entertainment. They also provide means and methods for social control and realization of the worst in human behaviors. Yet technology as a major arena of human activity and engagement scarcely enters the consciousness of most people, despite the fact that we interact with technological systems and artifacts virtually all of our waking moments and even when we sleep (McGinn 1991; Melzer, Weinberger and Zinman 1993; Latour 1996).

Considerable confusion arises in social circles when one mentions the word "technology." To many people, technology refers absolutely and circumspectly to computers, computer networks, software, and related devices that are part of the

Information Age. Most people in industrialized societies by this definition are not only explicitly aware of technology; it is consciously used on a daily basis and they are frequently proficient in its use.

Technology, as we will employ the term in this paper, is of much older vintage than modern information technologies. While it includes computers and related devices, technology also embraces the entire human-constructed world of artifacts and systems (Webster 1991; Volti 1995). There have been two major meanings for the word '*technology*' and the different origins of these meanings have contributed much to semantic confusion about technology in contemporary discourse:

> Historically, that which comes first is *tekhnologia* and its cognates as the *techne* or art of *logos* or discourse. See, for example, the initial occurrence in Aristotle's *Rhetoric* I, 2(1354b17 et passim). . . . While transliterated into Latin by Cicero (probably to impress his readers), the word remains virtually unknown in the medieval period. In the Renaissance it is re-created by Peter Ramus and other methodologists to cover the logical organization of all liberal arts – although a late 17th century English transliteration (from the Greek?) continues to be used in the more restricted sense as referring to grammar.
>
> The late 17th and early 18th centuries, however, also witnessed the initial use of '*technology*' to refer to systematic discourse about the mechanical arts, a usage which involves a quite different definition. Christian Wolff (1679-1754), for instance, defines technology as 'the science of the arts and of the works of art,' meaning the mechanical arts. Jacob Bigelow's *Elements of Technology* (1829) identifies technology with the practical applications of science – including both the applications of already acquired scientific knowledge and of scientific method to practical affairs. And it is this second family of meanings that has taken on existential primacy, especially as the logos of making and using has become progressively reified in the objects, processes, and information structures of the modern technological world." (Sun in Mitcham and Grote 1984: 174f.)

Professor Stephen J. Kline (1985) of Stanford University, suggests that technology is a complex set of concepts, artifacts, and systems, that can be discussed in four major ways: 1) as artifacts or hardware, e.g., pencils, microscopes, antiballistic missiles, a test; 2) as sociotechnical systems of production, e.g., an automobile assembly line or elementary and secondary education; 3) as technique or methodology, e.g., the skills, knowledge, and general know-how to rebuild an engine, engage in oil painting or solve a math problem; and 4) as sociotechnical systems of use, e.g., an airplane presupposes a much wider system of rules and regulations, licenses and trained pilots, passengers and/or cargo, maintenance, airports, manufacturing facilities, and air traffic control.

Jacques Ellul has spent much of his academic life writing about technology. He prefers the french term "*technique*," believing that its connotations are more exact and meaningful, as he explains:

> When I use the French word *technique*, normally translated into English as *technology*, I do not mean exactly the same thing as the french word *technologie*, which is also translated into English as *technology*. We have to be meticulous about this simple point of vocabulary. I know that the two are habitually confused. Etymologically, of course, *technologies* means a discourse on *technique*. That is the true meaning of *technologie*. Now when I speak of *technique* [English *technology*], I am speaking of the technological phenomenon, the reality of the technological. When I view an automobile, the engine of the automobile is in the category of *technique*, i.e., the technical. It is not what the French call *technologie*, even though English usage tends toward *technology* in this point. The study of the engine and the discourse on the engine is *technologie*. But the phenomenon itself must be viewed as part of *technique*. I know the difficulty of this semantic problem in English, for there is only one single word, *technology*, to designate both *la technique* (the concrete thing) and *la technologie* (the discourse, the teaching of the subject itself). But we must absolutely distinguish between the two. It is the same difference as between *society* and *sociology*, or between earth (*ge* in Greek) and *geology* (the science of the earth). However, there is a further difficulty. The English word *technology* essentially concerns the work of engineers, chiefly in the industrial milieu. But for me, *la technique* is a far wider concept, referring to efficient methods applicable to all areas (monetary, economic, athletic, etc.). I would prefer that English retain the word *technique*. Thus, in this sense, it is *technique*. In this reality, in this substance – one might say in our Western society, it is *technique*, i.e., (in English), *technology*, that struck us as the determining element, and also as the determining element in the creation of, say, value. (Ellul in Vandenberg 1981: 32f.)

Ellul believes there is a somewhat distinct dividing point in human history within the West when technique came to ascendancy with its obsession with efficiency as its chief defining characteristic rather than its justification under religious, traditional, or practical reasons (Ellul in Vandenberg 1981: 36f.)

Technology is the oldest of human endeavors. Early tools, art, production of clothing, human language, and symbolic communication all are examples of technologies in use since the dawn of time. Technology predates by thousands of years the advent of other fields of human endeavor such as science, history, and the social sciences. Technologies evolve in response to changing human needs or environments. Developments in technologies are influenced by a variety of factors including available materials, time, creativity, market demand, and prevalent ideas and beliefs within human cultures in terms of religion, philosophy, and social mores. For these reasons, human beings have often created very different technologies to meet the same basic human needs. Ancient cultures who depended on rivers for their existence, for example, evolved

a variety of river artifacts and systems to aid transportation and commerce, exploit the river's resources, and manage the river's course (McAdams 1996; Westrum 1991).

Technology is the application of knowledge, tools, and skills to solve practical problems and extend human capabilities. Technology is most commonly known by its products and impact on society. It is enhanced by the discoveries of science and shaped by the designs of engineering. It is conceived by inventors and planners, raised to fruition by the work of entrepreneurs, and implemented and used by society. Sometimes, though, it enters the social system imperceptibly and brings about many changes, often in unforeseen ways.

Technology is in part a social process. Technology is supported to serve the society that generates and controls it through society's private and public institutions and people. Society affects and is affected by its technology. The results and dynamics of these interactions are key to the ways in which technology affects people's lives.

State accountability systems for education are designed to address the twin perceptions of chronically low student performance on state administered tests and the failure of schools to adequately prepare students for life, living and further education in the twenty-first century. They are policy formulations whose technical functions of collecting, analyzing, and publishing data coupled with a continuum of state intervention procedures are intended to bring about desired changes in schools and populations of students.

Kline's (1985) four-fold way of discussing technology introduced above reminds us that state accountability systems involve a complex set of artifacts. These artifacts include criterion and norm-referenced tests, demographic data, and school data about measures such as dropouts, average daily attendance, teacher grievances, and disciplinary actions. These artifacts are increasingly melded together into published reports (some states referring to them as "report cards," and similar in many respects to the "League Tables" within English schools) from which policy makers and others are encouraged to make valuative judgements about school and district "quality." Sometimes a state goes even further and specifically labels particular schools on an evaluation continuum from "excellent" or similar commendations to "failing" or terms with similar negative connotations. About 36 of the 50 states in America publish school and/or district reports on an annual basis. (These reports can be accessed online through the Council of Chief State Schools Officers website, http://www.ccsso.org.) Nineteen publicly rate performance or at least identify low performing schools. Sixteen states have been given direct powers to intervene in local schools who are viewed as chronically underperforming and 14 states provide some form of monetary reward to schools who perform in a manner judged acceptable. (Education Week 1999).

It is vitally important to remember some key underlying assumptions about state accountability efforts. They include:

(1) educational quality can be determined from a fixed (and generally small) number of measures, collected within one or more brief time series
(2) students perform to the best of their abilities on state administered tests even though these tests are generally disconnected from local school curriculum sequences and individual student grades
(3) publishing information, in and of itself, will serve as a motivator for school improvement on the measures selected by the state for public reporting
(4) schools will routinely supply accurate and timely information to the state upon request
(5) school-based strategic planning, informed by the kinds of measures the state collects and publishes, will led to better student performance on state tests and improvements in other measures valued by the state
(6) measures that the state values are more important to the individual school than any competing set of measures which might lead the school to alternative courses of action
(7) there is common and pervasive understanding of the state's educational reform agenda from the superintendent's office and school committee down to the level of the individual classroom teacher and the agenda is sufficiently detailed to suitably guide local planning and action

Many more assumptions can undoubtedly be generated. This list is sufficient to make the point that several of these assumptions are not supported by research findings about school reform to date in the United States or elsewhere (cf. Broadfoot 1996, Sarason 1996, Vinovskis 1999, Mungazi 1999, National Research Council 1999). However, as state policymakers, we realize that states must act in the interests of both their younger and older citizens to constantly improve the educational experiences and outcomes of public education. The expenses associated with public education will always prompt state actions in the arena of accountability. School reform will be a permanent fixture of the educational landscape. Recognizing accountability systems as technologies of social control, however, holds promise of at least informing our decisions and perhaps mitigating harm.

Selected Principles of Technology

All technologies embody the explicit and implicit values of their creators (Ellul 1990; Green, Owen and Pain 1993; Morgall 1993). A chair, for example, in a modern manufacturing plant embodies the concept of "normality" or "average" in terms of its dimensions. It presumes certain things about the unknown user including the length of their limbs, the amount of sustained time they might spend in the chair, and varied uses for the chair. It also reflects views of its creators in regards to style, color, and "feel." A handmade chair created by a colonial craftsman, on the other hand, while often more individually tailored for a particular user, also unavoidably embodies certain values of its maker (Pound 1989).

In a similar manner, accountability systems embody the explicit and implicit values of state policymakers. The acronym WYMIWYG – What You Measure Is What You Get – reminds us that every data element selected by the state for public reporting and every test or other measure employed drives behaviors within the larger system. They also communicate to teachers, parents, administrators, and the public those things that the state "values." Conversely, it is all too easy for people to presume that those things that the state chooses not to measure are of lesser importance. This can sometimes be seen most clearly in state assessment systems – which inevitably can at best only sample a smattering of student knowledge on a given day in a small area of learning. Some schools focus so heavily on these state tests in the form of advance preparation that other valuable learning experiences are sacrificed for the sake of meeting the state's expectations regarding these narrow performance measures. (There is also the well-known phenomenon that achievement generally declines, sometimes dramatically, when a new state test supplants a prior state-administered test.)

Another key concept for all technologies is the idea of "tradeoffs." Each technological artifact, system, or methodology conveys certain benefits while imposing certain burdens or costs associated with its use or implementation. For example, a statewide testing system enables central policy makers, the public, and other interested individuals and organizations to get a read on how well the system is doing in regards to certain valued ends as measured by the testing instruments. On the other hand, such a system also involves direct financial and other costs due to the processes of creation, dissemination, administration, and reporting of the results. Some users are benefited by the technology, others suffer at its hand, while for others this particular technology is relatively neutral (Wenk 1995; Winner 1986). A second example of a tradeoff is the push toward individual student accountability in many states where failure to achieve the state's required standards results in a student failing to receive a high school diploma. The history of these high-stakes testing systems – played out in systems where there is clear inequity in educational opportunity to learn – has resulted in sharply increased dropout rates. Many students who fail significant portions of these tests in tenth grade conclude that they will never pass them and give up in despair. These students, of course, do not disappear from the state – they tend to reappear in other state social systems such as welfare, criminal justice (about 85% of inmates in RI do not have a high school diploma or its equivalent), and mental health.

Every technology also results in unanticipated consequences for users and others affected by it (Rothenberg 1993; Sarewitz 1996). These consequences cannot be forecast in advance by the designers of the technology but come to the fore as particular technologies are implemented in situations not within the purview of the original design work (MacKenzie 1996). For example, the first paved roads in cities were placed there due to the huge amounts of horse droppings that had to be collected from city thoroughfares and the problems with carriages getting stuck on muddy avenues. This network of paved streets became an ideal means of conveyance for the first "horseless carriages" and promoted their rapid adoption by affluent city dwellers. Developers of the "peaceful uses of atomic energy" in the United States in the fifties did not foresee the

present problems of low level radioactive waste disposal, nuclear power plant failures and decommissioning, and public opposition to expansion of power plant sites (Bauer 1997; Marcus and Segal 1989; Segal 1994).

The large-scale, long-term consequences of the accountability systems that have arisen in many states in America are yet to be seen. Annually there are schools and districts across America who are exposed as "cheaters" on state tests or for falsifying state-required accountability reporting information. We think it prudent to keep in mind that there are unintended consequences associated with any technological system. The best accountability systems are those that exhibit reflective response to changing contexts and information associated with educational reform. The hardest part is to maintain an appropriate level of tension between state control and direction and local autonomy and ownership. The level of tension must change over time and also has to be sensitive to the ecological niches of particular schools and districts. The attempt must be made to treat these local systems equitably not equally. Regulations have to be framed in a manner that allows for human judgment and flexibility and exceptions to many rules have to be recognized and tolerated where it seems prudent and proper. At the same time, no district or school can be allowed to subvert or ignore the state's agenda. The measure of our success is in whether students are prepared academically and socially for life, living, and further education. Our state accountability system known as SALT – School Accountability for Learning and Teaching – is attempting to realize this goal. This is a significant and continuing sociopolitical challenge that demands the best of current thinking and risk-taking behavior as we look to the future.

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